CHAMBER OF MINES
of South Africa

T: +27 11 496 7100
F: +27 11 834 1664
E: info@chamberofmines.org.za

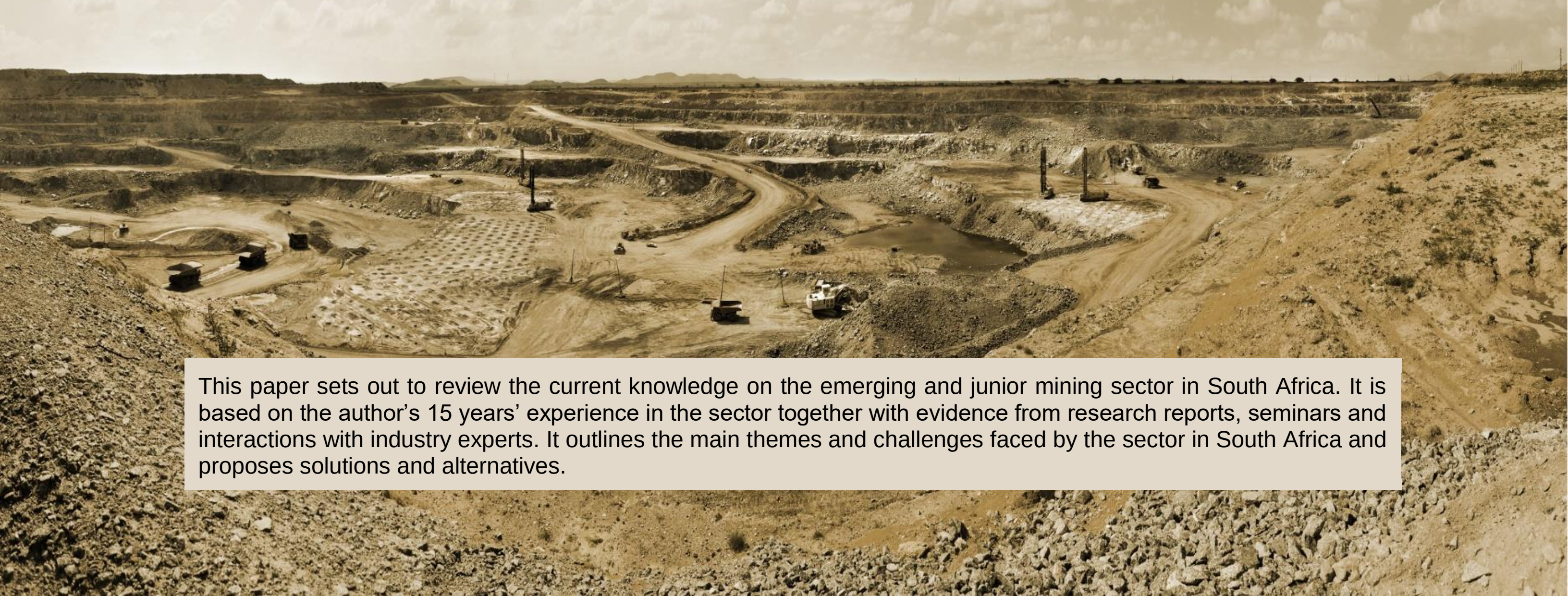
5 Hollard Street, Johannesburg 2001
PO Box 61809, Marshalltown 2107

CHALLENGES FACING THE EMERGING MINERS' SECTOR IN SOUTH AFRICA

DEVELOPING A VIABLE EMERGING AND JUNIOR MINING SECTOR IN SOUTH AFRICA.

Chamber of Mines report, 2016

Grant Mitchell
6 September 2016



This paper sets out to review the current knowledge on the emerging and junior mining sector in South Africa. It is based on the author's 15 years' experience in the sector together with evidence from research reports, seminars and interactions with industry experts. It outlines the main themes and challenges faced by the sector in South Africa and proposes solutions and alternatives.

Part 1: Background

1.1 Purpose of the report

'Emerging' mining, which is usually referred to internationally as 'junior mining', is widespread in South Africa. A cursory review of the mining and prospecting rights issued in South Africa would indicate that by far the majority of mining operations in South Africa are smaller and could be defined as junior mining companies.

However the sector is relatively unorganised and emerging mining companies rarely get an opportunity to influence national mining policy. This is a source of great frustration for emerging miners who feel that they are unsupported and that both the large mining houses and the government have excluded them from the debate.

The report sets out to explain the challenges faced by emerging miners, supported by empirical evidence based on reports on the sector, documented workshops and seminars and evidence from industry experts.

The report will be used to be taken forward to the Department of Mineral Resources (DMR) and other structures such as Phakisa to sensitise the government to the challenges faced by the sector. It can also be used to sensitise the large mining houses and other industry players to the challenges within the sector.

1.2 Research approach

The report is written in an academic format with references as sources acknowledged. Sources will include other research in the area both local and international, evidence from workshops and seminars and interviews with industry experts.

Overall it will be an evidence based document. In addition it has been tested in the sector for commentary, by industry experts who have made their inputs.

1.3 Background to the South African mining industry

Mining in Africa dates back thousands of years. Evidence of this was found in the rocks at the Cradle of Mankind near Krugersdorp, where early man Homo sapiens started life in Africa. In Swaziland evidence can be found of iron mines which existed over 70,000 years ago. Iron workings appear to have begun in West Africa as early as 2,500 BP, and the first metals workings settlements south of the Limpopo River appeared about 1,700 years ago. There are still some old iron furnaces used by indigenous people in South Africa preserved on the Melville Koppies in Johannesburg. [1]

[1] The History of Mining. Mintek ASSM Training School.

The find by PJ Marius of gold deposits in the Jukskei and Crocodile rivers (just north of where Johannesburg stands today) in 1853 ushered in the development of the modern deep level gold mining industry in South Africa. By September 1886, a discovery by George Harrison of an outcrop of the main Reef, and a few months afterwards at Langlaagte, led to nine farms in the central rand from Roodeport to Germiston being proclaimed public diggings. From this point onwards prospecting gave way to the establishment of the industry along the lines of the Witwatersrand.

A government commission in 1886 recommended the granting of Mining Lease Rights for the larger companies and syndicates. The first of these syndicates was formed by Robinson in partnership with Beit (the Robinson Gold Mining Company). Others followed. Rhodes and Rudd formed Gold Fields, Barnato formed Johannesburg Consolidated Investments in 1889, whilst Rand Mines was formed by Eckstein and registered in 1893. By the middle of the 1890s more than 70 companies were registered.

By a process of rationalisation, a number of large mining corporations developed and this eventually led to the 'big six': Anglo American Corporation, Johannesburg Consolidated Investments, Anglo Vaal, Rand Mines, Gencor and Gold Fields. These six groups dominated the industry for most of the 20^{th} century. It is interesting to note that the six major mining houses after World War II still dominated the industry in 1990. However in the 1990s a restructuring process began and most of the above-mentioned groups delisted from the Johannesburg Stock Exchange and either merged with other international mining companies or listed their head offices on international exchanges such as the London Stock Exchange. The mining industry in South Africa had become truly global and this would have a significant impact on how the industry would operate at a local level. It also opened up opportunities for new emerging companies, both South African and international, to exploit South Africa's rich mineral resources. (Mitchell G. a., 2002).

The globalisation of the industry did however bring with it significant challenges. The old conglomerate model; where a corporate mined several commodities, had its own form of sustainability. So for example, if a particular commodity in its portfolio was not doing well, the conglomerate could offset the losses against other commodities in the group which were performing. This meant that mining companies kept their portfolios for a longer period of time.

With globalisation and with international investors based abroad, the model changed considerably. The conglomerates began breaking up and focused, commodity specific companies emerged. The new international investors however put a far greater emphasis on short-term profits – if a specific commodity was not performing over even the short term – 18 months – the investors could withdraw and invested elsewhere.

As Bowman (Bowman, 2016) noted:

"The integration of the industry into globalised financial markets following the liberalisation of the South African economy subjected mining companies to more shareholder value pressures, with investors easily able to shift capital elsewhere to better yielding opportunities. During the boom which ended in 2008, this encouraged large cash distributions to shareholder and costly efforts to deliver output growth, propelled by a narrative of secular increases in platinum prices resulting from the 'commodities super cycle'. The argument made here is that financialisation - the deepening and intensification of capital market pressures - exacerbated the inherent cyclicality of the platinum industry."

In addition, the promulgation of the Mineral and Petroleum Resources Development Act (MPRDA) (2002) placed the state in the centre of the mining industry by entrusting it to act as the custodian of the nation's mineral resources. The lead agent in this regard is the DMR which is responsible for issuing of mining and prospecting rights subject to certain conditions. This includes a submission of a social and labour plan, environmental compliance, and a rehabilitation fund to support post mining, to name a few areas. In addition, the Mining Charter agreed to by the key stakeholders in 2004 (reviewed in 2010) sets targets for black economic empowerment (BEE) in a number of areas including ownership, human resource development, procurement, beneficiation, mine community development, employment equity and reporting and compliance. The Charter is currently undergoing its third review.

The impact of the above is that the South African mining industry has changed considerably since 2002, particularly in relation to black ownership and control. BEE companies have emerged in numbers and some have grown into large corporations. Examples of the latter are diversified miner African Rainbow Minerals (ARM) started by Patrice Motsepe and coal miner Exxaro started by Sipho Nkosi. In addition there is a multitude of junior and emerging companies that are BEE companies. There is no current accurate evaluation of the extent of this sub sector however.

1.4 Defining emerging mining

The term emerging mining can cause confusion so a clear workable definition will be proposed. The distinction between the major mining houses on the one hand and small scale (or artisanal) on the other hand needs to be developed. Emerging mining covers a wide constituency and the parameters of this sub sector will be explored. Whilst there are particular interest groups within the emerging mining sector, there is sufficient commonality upon which to build a consensus movement. Internationally the term junior mining is usually used and refers mainly to prospecting companies.

Category	Activity	Operation	Gross asset value	Annual sales value
Majors	Production	Global markets	>R8 billion	>R8billion
Juniors	Contractors, production and exploration companies	South African based	>R18 million but below R8 billion	From R30 million to R8 billion.
Emerging miners	Exploration/ production	South African based	Below R1 billion	Below R1 billion
Small scale (formal)	Producers	Regionally based	Up to R18 million	Up to R30 million
Small scale (Informal)	Producers	Locally based	Up to R150,000	Up to R500,000

Table 1: Defining emerging mining

Major companies

Major companies are defined as large producers who work in multiple jurisdictions. They are usually referred to as transnational companies. On the Johannesburg Securities Exchange (JSE) the average market capitalisation of a major mining company is R24 billion. They do some exploration but generally look for large scale capital intensive projects. Their exploration activity has dropped considerably compared with the past. The smallest major on the JSE has a market cap of around R 8 billion.

Junior companies

The term 'junior' mining internationally refers to prospecting companies who are only involved in the early stages of mining. In South Africa, however, the term junior has taken on a wider meaning and includes smaller producers. This is largely the result of the legislative environment, in particular the Mining Charter. So a significant difference between South Africa and Canada and Australia for example, is the BEE factor and for this reason alone junior and emerging mining in South Africa needs to be treated differently. Examples of junior companies in South Africa are Wesizwe in the platinum sector and Kuyasa Coal in the coal sector. Both are home grown South African companies.

Emerging miners

Also a term indigenous to South Africa, emerging miners are typically smaller BEE companies. They can be either involved in the early phases of mining or as producers of mineral commodities. Examples are the many smaller coal producers who have agreements to supply Eskom with coal. Examples are Mwelase Coal and Atha Mining.

Small scale mining

Small scale miners are typically smaller producers. They are registered companies and have mining rights or permits. Examples are the members of the Clay Brick Association who collectively produce 3.5 billion bricks per annum.

Artisanal mining

Artisanal miners may or may not be registered with the DMR. The strategy of the DMR is to grant permits or mining rights to all artisanal miners, however in practice this has not happened. There is a small scale miners' directorate at the DMR which is responsible for this. Mintek has a small scale mining division which supports artisanal mining in the technical aspects as well as in skills development. Small scale miners use rudimentary mining methods, such as pick and shovel, and in some cases simple technology (such as screens or simple processing plants for example).

In order to interpret **Table 1** by way of comparison the National Small Business Development Act of 2003 defines small mining in **Table 2**.

Size	Total full time equivalent of paid full time employees.	Total annual turnover	Total gross asset value (fixed property excluded)
Micro	<5	<R150 000	<R100 000
Very small	<20	<R3m	<R1.8m
Small	<50	<R7.5m	<R4.5m
Medium	<200	<R30m	<R18m

Table 2: Classification of mining and quarrying operations by size (2003)

It should be noted that this classification was developed in 2003 and is therefore out of date with respect to the current financial parameters.

1.5 International experiences of junior mining

Junior mining is well established internationally particularly in countries like Australia and Canada which have active prospecting sectors. Canada from the 1990s actively sought to stimulate junior mining and prospecting with financial incentives such as the Flow Through Share Model which successfully stimulated prospecting. The Canadian model is based on a cooperative relationship between large scale and junior mining companies where the smaller company identifies deposits and then enters into a JV with the major producer to exploit the deposit.

In addition, the junior sector in Canada is well organised. The Prospectors and Developers Association of Canada (PDAC) represents some 1,050 organisations and some 7,960 individual members. It was formed in 1932 and was designed to "promote a responsible, vibrant and sustainable Canadian mineral exploration and development sector. The PDAC encourages leading practice in technical, environmental, safety and social performance in Canada and internationally."

The association's activities and services fall into three categories: advocacy, information and networking. The association is best known for its annual convention, trade shows, and investors' exchange. In 2015 the event attracted 23,578 attendees from over 100 countries.[2]

In the March 22 2016 newsletter PDAC reported on the Canadian government's new initiatives in supporting the junior sector. In the 2016 Federal Budget, support measures included a renewal of the Mineral Exploration Tax Credit (METC) until March 2017, as well as measures to ensure that costs associated with environmental studies and community consultations are considered as Canadian exploration expenses (CEE), something the PDAC has advocated since 2013.[3]

[2] PDAC website 2016
[3] PDAC Newsletter, March 22 2016

1.6 Flow through shares for financing junior mining

The mechanism of a flow-through share (FTS) was first developed in Canada in the 1950s, and has since then been a uniquely effective feature of that country's regime for mining and oil and gas taxation.

This mechanism allows a mining company to obtain financing for expenditures on exploration and pre-mining development. The company renounces or flows through certain expenses to the purchaser of the share. These expenses are deemed to be incurred by the investor and not the corporation, and accordingly they reduce income subject to tax in the hands of the investor (which can be an individual or another corporation). The FTS mechanism, therefore, allows costs to be claimed sooner than they would have if they were retained in the corporation incurring them.

Resource expenses that may be flowed through in this manner include exploration and certain development expenses.

For the individual investors, the advantages of investing in FTS can be twofold:

(i) they receive a 100% tax deduction for the amount of money they invested in the shares, and
(ii) they stand to see the value of their investment appreciate in the event of successful exploration.

Many mines have been found with the help of FTS money. Some well-known examples include the Louvicourt copper-zinc mine, the Eskay Creek gold-silver mine, the Troilus gold project, and the Kemess South gold-copper project.

A special provision introduced in 1992 allowed certain development expenses to be treated as CEE in the hands of an FTS investor to assist FTS financing by junior oil and gas companies. Consequently, an FTS investor is entitled to a 100% write-off for CEE, rather than only a 30% write-off, which is the default for development expenses.

In 1996 a number of severe FTS restrictions were introduced in Canada. Firstly, the amount of oil and gas development costs that could be reclassified as CEE under an FTS agreement was reduced from $2 million to $1 million per year. Secondly, this entitlement was restricted to issuing corporations that had less than Can$15m in taxable capital employed in Canada. Thirdly, other tightening measures were introduced to ensure that the FTS mechanism was used only to finance more risky expenditures. Development expenses for the mining industry that related to the cost of acquiring mining properties, oil and gas property expenses and 'off-the-shelf' seismic costs, were no longer transferable to FTS investors.

On the positive side, the 1996 amendments allowed more time for companies to undertake certain resource expenditures related to FTS financing - this modification to the so-called 'look-back' rule took place to allow exploration expenditures renounced to investors to be incurred by the issuer up to a full year (rather than only 60 days) after the end of the calendar year in which the funds were raised.

During the next four years, these restrictions contributed to a substantial cutback in exploration expenditures.

In 2000, the FTS was re-examined, and, as a stimulatory measure the federal government established a 15% Investment Tax Credit for exploration in Canada, in addition to the regular tax deduction associated with FTS investments. This credit differs from the conventional FTS claim in three main respects: it is restricted to exploration costs (and thus excludes pre-production development costs); it is claimable only by individuals (companies, trusts and other artificial persons are thus excluded); and it is claimable as a deduction against the investor's federal income tax itself (rather than as a deduction from taxable income).

A significant amount of the increasing exploration activity in Canada in recent years has been financed by FTS. From October 2000 till the end of 2005, Can$1673m was raised for mining using FTS (excluding the sum raised for oil and gas). In the first four months of 2006 alone, Can$145m was raised, which is the most for any year for this time period, since the inception of the FTS system.[4]

1.7 Flow through shares for South Africa?

Van Blerck (2006) suggests that flow-through shares could be used in South Africa for the following:

Flow-through shares for prospecting

Problem: Companies that engage in prospecting typically incur substantial costs over reasonably extensive periods. Even a relatively successful prospector will only achieve success on a sporadic basis. This means that, for a dedicated prospector (that is, an entity that limits its activities to prospecting, rather than one that conducts mining operations as well), there will be long intervals where tax losses build up without any tax relief. Worse still, a relatively unsuccessful prospector may never qualify for any meaningful tax relief at all, as it will not generate significant income against which prospecting costs may be offset.

Effect: The result of this is that the costs and risks for a dedicated explorer are escalated abnormally. This applies especially to dedicated prospecting companies, the consequence of which is that exploration activity is inhibited.

[4] Source: Dr Robert Clark, Director, Natural Resources, Canada.

Solution: The introduction of the flow-through share (FTS) concept for prospecting ventures. This will allow the prospecting company to renounce its rights to the tax deduction for the qualifying prospecting costs, and to allow this deduction to flow through to the purchaser of its issued FTSs. As has been noted above, a very successful precedent has been established in Canada. Consideration could also be given to enhancing the FTS in the manner of the Canadians in 2000 by introducing a 15% Investment Tax Credit. Another matter to evaluate would be whether the basic FTS incentive should be extended to worldwide exploration by local companies. This may prove too difficult to motivate at this stage, but perhaps consideration could be given to extending the benefit to exploration within SADCC countries.

Flow-through shares for mining start-ups

Problem: Companies that commence mining operations (especially underground operations) typically incur substantial development costs before mining commences. Although there is a reasonably favorable tax regime which applies to these costs – they are deductible in full – this deduction is only allowed once mining commences. Even then, the mine itself may take a considerable time to generate sufficient income to give this tax deduction full effect – the deeper and more complex the ore body, the longer this delay. This means that, for a new mine, there will typically be a reasonably long period until the full value of tax relief on development expenditure has full effect. Worse still, should the mine fail, there may be no tax relief at all. This harsh position may in some instances be mitigated by the partial relaxation of South Africa's stringent tax ring-fencing provisions, but only where the mining company has more than one mining operations, and where at least one of these sister mines is both well-established and profitable.

Effect: The result of this is that the costs and risks associated with a new mine are escalated abnormally. This applies especially to new mining initiatives, which are unlikely to be associated with well-established sister mines. The consequence is that new mining endeavors are inhibited, especially in the case of new entrants to the mining industry.

Solution: The introduction of the FTS concept for new mining ventures, especially in the case of new entrants to the mining industry, to apply to pre-production development expenditure. This will allow the mining company to renounce its rights to the tax deduction for the qualifying development costs, and to allow this deduction to flow through to the purchaser of its issued FTSs. This would place all new mining endeavours on an equal footing, whether conducted by established players or new entrants. As has been noted above, a very successful precedent has been established in Canada.

Flow-through financial instruments for transformation

Problem: The transformation process requires targets to be achieved in relation to mining ownership by historically disadvantaged South Africans. However, where such a transfer takes place, significant tax imbalances can come about. By way of illustration, such a transfer will need to be financed. The financing costs will be significant, where major mining operations are involved. Where debt is used for such financing, the deductibility of the resultant interest costs can be problematic. For example, interest incurred to buy equity (in the form of shares) is generally not tax-deductible. Even if the interest were to be made to be statutorily tax deductible, in many cases these expenses would significantly exceed the tax base of the acquirer. This follows for a number of reasons, including the fact that many empowerment groups do not have really significant tax bases, because of their relatively recent entry into the mainstream of the economy, and even where they do, the lack of a group tax system means that the tax base will be split into smaller pockets, isolated in separate corporate entities, making it difficult to mobilise. The latter problem is often overcome or mitigated by established groups by wholly-owning all operations, and then divisionalising these operations (more on this later) but this option will often not be available in the transformation process, as empowerment groups will often be participating as minority partners, and in these circumstances they cannot wholly-own operations – divisionalisation is thus precluded. Another means of mitigation is for financiers to use preference shares as opposed to interest-bearing securities, as dividends are tax neutral. However, this can lead to possible tax disallowances for the financier, especially if such transformation financing is expensive.

Effect: Transfers of ownership required for transformation purposes will tend to be inhibited by abnormally high after-tax debt costs.

Solution: The adaptation of the FTS concept for a specially defined financing instrument, (say, termed 'transformation bonds') to apply to the financing of qualifying transformation transactions. This will allow the empowerment company to renounce its rights to the tax deduction for the qualifying interest costs, and to allow this deduction to flow through to the holder of the financing instrument. **(van Blerck, 2006)**

1.8 Could flow through shares work for emerging miners?

The above proposals by van Blerck provide a practical guideline as to how the emerging mining sector could be stimulated in South Africa. Is it however feasible? At the time that van Blerck's paper was written (2006) a number of meetings were held between the South African Mining Development Association (SAMDA) and the National Treasury in order to explore the possibility of changing the legislation in order to introduce the Flow Through Share Model into South Africa. After several meetings the concept was abandoned as the Treasury felt that it would be too complex to accommodate the legislative changes necessary.

Despite this initial attempt failing, it is argued that the model should be considered further as it provides a practical and proven method of stimulating smaller mining and exploration in South Africa. It will however require strong lobbying efforts and a political will to succeed.

1.9 The Bakubung Initiative

In 2000 at the initiation of Richard Linnell, a director at BHP Billiton, a group of senior mining executives from big and junior mining companies, small scale miners, financial institutions, and NGOs involved with mining and senior government officials, met at the Bakubung lodge in the Pilansberg to map a way forward for junior mining in South Africa. The initiative was in anticipation of the state becoming the custodian of the country's minerals and therefore mining rights would be held by a far wider group than had been the case under a private ownership regime.

The process was facilitated by Gerald Harper, past President of PDAC. In the 1990s Canada had been highly successful in developing prospecting and junior mining and this was largely attributed to the Toronto stock exchange creating favorable conditions for junior companies to raise finance in order to prospect. As has been reported on the flow through share system had been particularly successful, and had led to an expansion of mining activity by Canadian companies worldwide.

The workshop interrogated how the Canadian experience could be replicated in South Africa, and what lessons could be learnt.

The outcome was a number of decisions were taken. It was decided to investigate the setting up of a private equity fund to support junior and exploration activities, and a committee was selected to start a junior mining association. Both of these initiatives will now be reported on.

1.10 The New Africa Mining Fund (NAMF)

NAMF was established in 2003 to assist the junior and emerging BEE sectors. The fund raised around US$85 million to be invested in projects including precious metals, base metals, iron ore, industrial minerals, coal and diamonds. Responding to the objectives of the MPRDA the fund was intended to support BEE entities in the raising of capital for projects, particularly as this had been identified at Bakubung as an obstacle in the development of the BEE and junior sector. A number of large companies such as BHP Billiton, Harmony, Gold Fields and Exxaro invested into the fund.

The typical profile is to invest into projects in South Africa and other parts of Africa at the development stage and develop them to a point until they become attractive to acquisition by larger companies.

NAMF invested into the following projects:

- Petmin ltd. Transactions include Samquartz , Springlake Colliery, and the Somkhele anthracite project
- Jubilee Platinum. A prospecting portfolio of platinum projects located on the South African igneous bushveld complex.
- Vermeno holdings. A large opencast deposit in excess of R500 million tonnes of titaniferous magnetite ore in the bushveld igneous complex.
- Lapa Goldfields joint venture. An early stage gold exploration project in Tanzania.
- Africa Resources Ltd. The company held 75% interest in the Kalukundi project situated 65 kilometres from Kolwezi in the Democratic Republic of Congo.
- Limpopo Coal. Situated in Limpopo on the border with Zimbabwe, it forms part of Coal of Africa's Vele project.
- South African Coal Mining Holdings. Listed on the JSE the company owns two collieries, llanga and Umlabu.[5]

A second fund called NAMF2 with a projected target of $300 million, was set up and followed on from NAMF1.

In 2014, due to poor commodity trading conditions, the fund was closed.

1.11 The South African Mining Development Association (SAMDA)

In response to Bakubung, an interim committee for junior mining was elected, chaired by Bridgette Radebe, the owner of Mmakau Mining, a junior BEE resource company.

This interim committee evolved into a formal junior mining association known as the South African Mining Development Association (SAMDA) in 2001. SAMDA commissioned the Minerals and Energy Policy Centre (MEPC) to conduct research into the extent and nature of junior mining in South Africa and two reports were produced.(Mitchell,G 2002) These reports indicated that there was a sizable number of junior companies that were not represented through the Chamber of Mines.

SAMDA's membership and status grew in its first few years of existence and the organisation made a number of submissions to government in key policy debates.

[5] Developing Africa: The new Africa Mining Fund, DeepSA, 2010

To summarise:

- Made a submission on the draft Mineral and Petroleum Development Bill. Principally, SAMDA supported the state as the custodian of the nation's mineral resources, as junior and emerging BEE companies had found it very difficult to access mineral rights. [6]
- Made a submission to the department of finance on the Proposed Royalty Bill (2003). SAMDA argued for a profit as opposed to revenue based royalty.[7]
- Produced a report to the DMR on the impact of the licensing process on SAMDA members. (2005). This report outlined difficulties SAMDA members were having with the licensing process.[8]
- Produced a report for the Department of Finance to discuss financing the junior sector (2006).[9]
- Made a submission on the revision of the Mining Charter (2009).
- In addition SAMDA was active on many national fora in the past 10 years. SAMDA sits on MIGDETT, was active on the Mining Development Board, sat on the Richards Bay Coal Task force, participated in the Coal Forum during the energy crises of 2008 and engaged the Preferential Producers' Forum and the Platinum Producers' Forum in bi lateral discussions.

From 2009 onwards however SAMDA began experiencing conflict with its membership partially due to competition between its members as well as to political infighting. Some of the larger companies that had initially supported SAMDA such as Harmony and Mvelaphanda withdrew membership as they were not happy with the policy direction that SAMDA was taking.

This impacted seriously on funding and SAMDA closed its offices in 2011 and retrenched its staff.

Although SAMDA is just a shadow of its former self, Bridgette Radebe still speaks on behalf of the organisation and makes policy inputs into government from time to time.

1.12 The Emerging Miners' Desk at the Chamber of Mines (EMD)

The Emerging Miners' Desk is an initiative of the Chamber to support, largely through services, its smaller member companies. Started in 2013, the desk initially focused on recruiting smaller companies into the Chamber with a focus on BEE companies. Currently some 30 companies fall under the EMD. These range in size from small BEE companies involved in early phase development up to larger established junior companies. The commodities covered are coal, gold, iron ore, manganese, chrome and platinum. In addition, two associations, the South African Diamond Producers' Organisation and the Clay Brick Association are members of the EMD.

---

[6] Representation on the Mineral and Petroleum Resources Development Bill. SAMDA 2001
[7] The draft Mineral and Petroleum Resources Development Bill. SAMDA submission to Treasury 2003
[8] Report to DMR on the impact of the mining licence process on its membership. SAMDA, 2005
[9] A framework for the stimulation of new mining development in South Africa. SAMDA 2006

The EMD provides services in the following areas:

- Holds public workshops on topical policy issues such as the raising of finance, health and safety and the Mining Charter
- Runs a mentorship programme
- Runs a help desk where members can make enquiries on any aspect of mining
- Engages with the media
- Networks with allied organisations such as Mintek, the DMR and the Science Councils.
- Conducts research into the sub sector
- Is involved in the recruitment of new members

1.13 Consultants and emerging mining

Emerging and junior mining companies often have to rely on the support of consultancy services in order to become operational. In South Africa there is a vibrant consultancy network in mining covering all aspects such a geological services, mining engineering, social and labour plans, industrial relations, environmental compliance services, and financial services. Some South African based consultancy services have developed a world footprint: examples being Shaft Sinkers and SRK. The Emerging Miners' Desk at the Chamber has a data base of consultants who have specialised in the junior sector.

Part 2: Challenges facing emerging miners in South Africa

In a survey conducted by the Emerging Miners' Desk at the Chamber the following areas were raised as concerns for emerging miners. (Mitchell G. , 2014)

2.1 Raising finance for emerging mining projects

A major obstacle in promoting emerging mining is the issue of raising finance. The obstacles range from the risk adverse nature of South African banks through to the need to develop pre feasibility studies and presentable bankable documents. At a workshop on *Financing for emerging mining* organised by the Chamber, a speaker from one of the major South African banks listed the following as prerequisites for funding a mining project:

"Mining involves large sums of start-up funds to get going. Small mines in particular need a lot of working capital. It's about interrelated factors such as the geological endowment as well as about raising finance. The three key issues in considering investing in a mining project are:

- Geological endowment. There must be evidence of a proven reserve through credible pre feasibility studies on which to grant a project funding

- Regulatory certainty. Regulatory certainty and the transparent administration of mineral rights were key in securing investment. Generally there was nothing wrong with the MPRDA per say, but the administration of it was a serious concern for investors. One amendment was problematic however: Section 2 requires ministerial approval for the transfer of shares within companies. This was certainly going to put future funders off as they needed to be assured of the free trade in shares.

- Capital. Mining is capital intensive and start-up costs are particularly prohibitive. International capital is also competitive and South Africa is currently not viewed as a positive investment destination as can be seen by the various downgrades (Moody's etc). Botswana is far outperforming South Africa in attracting investment and this can be mainly attributed to their more efficient administration of mineral rights and their more favorable approach to mining. "[10]

From the perspective from one BEE company the picture is somewhat different:

"There are no proper support mechanisms for new entrance to the industry. In the beginning we went to the various financial institutions as well as the IDC but we got nowhere. The IDC wanted pre feasibility studies but we did not have the funding to do these. Eventually BHP Billiton helped us – I don't know if it was out of kindness or they saw the potential of junior miners like ourselves- and this gave us a leg up.

[10] Presentation by Paul Miller from Nedbank Capital on Chamber Finance Workshop for Emerging Miners, November 2016

“What has happened with empowerment in the last 20 years is that a lot of empowerment companies who get a mining right find a partner and end up selling that right in order to realise cash and the result is that we do not have the crop of entrepreneurs which was the intention of the MPRDA and the Charter.

“Funders see you for what you don’t have rather than for what you have to offer which is the drive to succeed. Empowerment is not about passive receivers of benefits but rather supporting active entrepreneurs who are prepared to work hard to succeed. This is another mistake in the current environment.“ [11]

It would appear therefore that creative ways of funding emerging mining need to be sought such as the flow through share system as discussed.

2.2 Dealing with the Department of Mineral Resources

At virtually every workshop with emerging miners the DMR is raised as a challenge in the development of mining projects. The key issues raised are delays in issuing mining rights, misinterpretation of the law and in some cases duplicating mining rights.

As one BEE pioneer put it:

“My journey in mining began in 1990s when I decided that I wanted to enter the mining industry. In the last 20 years since the advent of democracy there have not been a lot of changes with respect to support for entrepreneurs who wish to enter mining. My journey began before the advent of the MPRDA of 2002 and the Mining Charter was not in effect yet.

“What has been put in place since then has not helped to gain ease of access. The DMR is still a problem and there are irregularities in the mining rights process. How can the DMR issue a mining right only to withdraw it later?”[12]

Strategies to deal with this need to be explored in addition to the dialogue taking place at Phakisa.

2.3 Exploration and emerging mining

Exploration in South Africa is currently in a sorry state which is partially due to the poor state of commodities internationally, but also due to the lack of suitable financial vehicles and models to stimulate exploration. Exploration in mining can be likened to research and development in manufacturing – if you don’t do it the industry will eventually collapse. According to the Geological Society of South Africa[13] there is very little exploration activity occurring at present due partially to the depressed commodity prices internationally as well as the unfavourable environment for raising exploration funds in South Africa.

---

[11] Mentors’ meeting: Johannesburg Country Club, September 2015.
[12] Mentors’ meeting: Johannesburg Country Club, September 2015
[13] Personal communication with Geological Society of South Africa

As one speaker at the finance workshop put it:

"So the result is that South Africa does not have a history of junior mining unlike Canada which from the 1990s onward was supported by the government by introducing tax incentives such as the flow through share system. The result is that Canada has the most active junior and exploration sector in the world and this has greatly contributed to their overall mining industry."[14]

2.4 The regulatory environment and emerging mining

Emerging miners are subject to the same regulatory environment as are major companies however were never consulted on the content of these laws nor have they ever been part of the review process. As a matter of urgency, emerging miners need to be included in this process as well as in processes such as Phakisa. The Emerging Miners' Desk has held workshops on environmental legislation, the Mining Charter, finance, and health and safety. In addition, a needs analysis was conducted by the Desk on key pieces of legislation and how they affect the emerging mining sector (See Appendix 1)

In summary in quoting from the report the most important issues are:

"Regulatory compliance is viewed as perhaps the second most important area. Areas where emerging miners require assistance are in obtaining EMP approvals for prospecting/mining, assistance in developing social and labour plans, obtaining a water use licence (WUL) for mining areas, health and safety compliance, monitoring WUL applications with the DMR, Mining Charter compliance, beneficiation policy as well as general dissemination of new policies and regulations that are mandatory for the mining sector." [15]

2.5 Policy lobbying on behalf of emerging mining

It is clear from the comments at the various workshops that there is a lot of frustration around the lack of an effective platform for emerging miners in government. Whilst the Emerging Miners' Desk has been successful in engaging smaller producers and providing services such as workshops and a mentorship programme, the commonly held view is that the Chamber is not promoting the emerging miners agenda at a policy level. What needs to be explored is how the Emerging Miners' Desk can develop a platform under the umbrella of the Chamber to influence policy and in some case bring in exemptions for emerging miners. There is a move afoot to start a Junior Coal Mining Association and the Emerging Miners' Desk is presently in discussions with the Steering Committee of this group to assist them and to develop alliances.[16] All of this will strengthen the lobbying capacity of the emerging mining sector. In addition, emerging mining was on the agenda at Phakisa and this linkage has been formed with the Chamber.

[14] Presentation by Paul Miller from Nedbank Capital on Chamber Finance Workshop for Emerging Miners, November 2016
[15] Key findings from the Emerging Miners' Desk Survey. Unpublished Chamber Report, 2014
[16] Personal communication with the Junior Coal Miners' Steering Committee, 2016

2.6 Interaction between large mining companies and emerging miners

There is very little cooperation between the large mining companies and the emerging miners in South Africa. This point is illustrated this year when the Emerging Miners' Desk wrote to seven of the larger Chamber members asking them if they would be willing to present their non-core assets to the Emerging Miners' Desk (these are assets that they were considering disposing of). Only one major producer responded to this request and was prepared to look at off take agreements with junior companies. This contradicts statements made by majors that they support junior mining in South Africa.

2.7 Mentorship

In 2014 the Emerging Miners' Desk at the Chamber approached 10 CEOs and former CEOs to act as mentors for the emerging miners who are Chamber members. The programme was to be *pro bono.* The group covered expertise in the coal, diamond, underground hard rock and surface mining sectors. Two of the mentors had experience in funding the junior sector and were still active in promoting junior mining. The team initially met with the senior executive Mr Vusi Mabena and the then CEO Mr Bheki Sibiya, and it was agreed to launch the programme with a joint meeting with the mentors and the emerging miners. At the first meeting a lot of discussion ensued and following on from this a number of requests were received. These included:

- A request from a group of women investors in purchasing a diamond project in the Northern Cape
- A request by a group of junior miners interested in purchasing coal projects
- A request by the Northern Cape Diamond Producers to get an opinion on the legality of certain aspects of the Diamond Amendment Act
- A request by an emerging BEE company to help facilitate access to geological information from a large company that had previously held a mineral right on a deposit currently held by the BEE entity
- A request from a foreign junior company to get guidance on the South African mining regulatory environment

Mentors were assigned to all of the above projects and in most cases a meeting was held and advice given. Few of the requests resulted in more than one meeting, however, feedback from the emerging miners was that the meetings were very valuable and provided new insights and direction for the companies. For example, in the case of the women investors the mentor was able to demonstrate to them that the business plan developed by the company was inadequate and may have resulted in considerable loss if pursued further.

Part 3. Conclusions

There needs to be a strategy to take the work done by the Emerging Miners' Desk forward. In particular, a model needs to be developed which will give the Emerging Miners' Desk a platform in both the Chamber and in government as a separate sub sector with particular needs. The Chamber is generally viewed as representing the large mining houses exclusively. Whilst there is some acknowledgement of the work done by the Emerging Miners' Desk, particularly with respect to the delivery of services such as the mentorship programme, help desk and public workshops, this is still viewed as a subordinate role and not the main focus of the Chambers' activities.

The Emerging Miners' Desk therefore needs to establish a stronger presence both within the Chamber and in government.

References

Bowman, A. (2016). *Dilemmas of distribution: financialisation, boom and bust in the post-apartheid platinum industry.* Johannesburg: SWOP.

Mitchell, G. a. (2002). *The development of a junior sector in South Africa: opportunities and options. Unpublished SAMDA report, Johannesburg.* Johannesburg: MEPC.

Mitchell, G. (2014). *Key findings from the Emerging Miners' Desk: A survey of Chamber members who are part of the Emerging Miners' desk.* Johannesburg: unpublished Chamber of Mines Report.

van Blerck, M. (2006). *A framework for the development of new mining development in South Africa.* Johannesburg: unpublished SAMDA report.

APPENDIX 1: ISSUES RAISED BY EMERGING MINERS IN A SURVEY CONDUCTED BY THE EMERGING MINERS' DESK

Business area	Illustrative response	Commentary
1. Raising finance	– to fund new projects and expansions on existing projects – general discussion on how projects are going to be financed with the stringent financial requirements. What are other companies doing to get financed? – we have to raise funding through commercial banking because the IDC does not assist – small scale mining is in need of finance; banks and financial institutions don't want to finance them because of their insecurity and lack of technical ability. Could the Chamber assist through proposals to financial institutions for support?	The financing of the small scale, emerging/medium miners is an ongoing problem, especially with the demise of organisations such as the New Africa Mining Fund which was set up specifically to assist in this regard.
2. Permit applications	– Most WULAs take a long time and even amending current WULAs can delay critical projects. The DMR has a policy of prioritising ESKOM applications and does not have the staff capacity to maintain a free flowing process. – we are applying for a new Prospecting Right Application and will require assistance in obtaining the PR permits and converting into Mining Right permits after exploration.	Permitting and delays in permitting has been an ongoing issue with the DMR for some time. The impact of delays in permitting on the emerging sector is however more severe as smaller companies are reliant on external funding for projects. In some cases investors have withdrawn from projects due to delays on the DMR side.

Business area	Illustrative response	Commentary
	– most of the small scale miners (read artisanal) do not have access to computers and therefore cannot take advantage of the SAMRAD online process which was implemented to stop corruption. There is a help desk in each mining region to assist the small scale miners, but it is not sufficient to cater for the vast need.	
3. Social and Labour Plans	**–** identification of economic development projects – recognition of housing projects by the DMR as part of the SLP – guidance on implementation of the SLP and meeting the Charter requirements – SLPs are not understood by the small scale miners. There is a lack of communication in the drafting of the SLPs. Projects that are in line with the IDPs of local municipalities are usually beyond the budgets of the small scale miners.	SLPs are problematic to implement due to the complex negotiations required between the mining company, the DMR, the local municipality and the community. Smaller companies find this particularly problematic due to the time involved and the resources required.
4. Skills development (skills levy, workplace skills plans)	**–** market intelligence, best practice – amongst small scale miners there is a lack of experience when it comes to the technical side of skills development. There is a need for a wide area of training for students. The Northern Cape government should consider training facilities to cater for mining subsidised by government.	Advice on workplace skills plans for emerging miners could assist in capacity constraints that they have. Advising on relevant mining courses and skills programmes within the National Skills Framework would also be beneficial.

Business area	Illustrative response	Commentary
5. Environmental compliance	**–** high reputational and administrative fund risks – NEMA EIAs are now requirements for areas with approved EMPRs and mining authorisations. This adds an additional step which the NGO coalition is exploiting by submitting objections and appeals to further delay mining. Even Water Affairs has now indicated that they will not continue with the issuing of a WULA until the NEMA EIA is approved – this is apparently due to Water Affairs being subordinate to Environmental Affairs. – applications for EIA authorisations (guidance and facilitation) – guidance on mine compliance requirements – updates on legislative requirements that may be applicable to our operation – constant changes in environmental and mining laws put pressure on small operators to revise their operations. They usually do not have the capacity, or the finance to employ the skills in order to make the necessary changes.	There is a need for information and advice on environmental legislation for the emerging miners. A workshop on this topic would be useful.
6. Industrial relations	**–** collective bargaining and unions - smaller operations sometimes experience problems when it comes to industrial relations	Many emerging and medium level mining companies believe that if they join the Chamber they will be forced into collective bargaining which is not the case.

Business area	Illustrative response	Commentary
7. Safety and compliance	– guidance on mine compliance – updates on legislative requirements that may be applicable to our operation – trends and targets – there should be clear and open communication between the DMR and the MH&S inspectors and mining companies. At this stage there is huge conflict between the principals themselves and there are no clear standards in writing. Smaller companies cannot afford to appoint consultants.	The Emerging Miners' Desk at the Chamber held a workshop on health and safety addressed by the Chief Inspector of Mines. In addition to this there is still a need to provide ongoing advice on health and safety compliance.
8. Company law and taxation	– clarification and queries on new tax laws and new company laws – perhaps updates and refresher seminars – company law at this stage is acceptable. SARS's diesel rebate system is causing problems especially where contractors have been appointed. In many instances BEE groups obtained mining licences but do not have experience in mining (technical ability) and financial backing (financial ability) and therefore are forced to appoint contractors. Under SARS regulations they cannot qualify for diesel rebates if appointed as contractors. There is also confusion about royalties paid to SARS and the	As suggested in the quote, updates on company tax laws and revisions, as well as revisions to mining tax would be a useful topic for a future workshop.

Business area	Illustrative response	Commentary
	method used to calculate the royalties is not even understood by many auditors.	
9. Sales and marketing	**–** New export markets and client database – market entities need more support from the state regulator. For example the Diamond Act poses many risks for small operations. Diamond miners have to take their production cycle to the state diamond trader (SDT) for evaluation. The SDT has a chance to obtain 10% of production at their price before a certificate can be issued to the producer to authorise the rest of his production. In many instances small producers cannot leave their operations due to the security risks and travel to Johannesburg to the SDT.	Sales and marketing is particularly relevant to the emerging diamond producers in the Northern Cape.
10. Mentorship	– as part of the SLP to mentor new employees and the processes thereof – communities at grass root level should have access to mentors and training facilities	The Emerging Miners' Desk at the Chamber is setting up a mentorship group whose function is to advise on technical, regulatory and business development aspects.
11. Technical/operational capacity	– although we are experienced operators, we may need assistance in the future – small mining companies lack technical capacity in many instances	
12. Dealing with contractors	– industry norms and regulations pertaining to mining contractors	

Business area	Illustrative response	Commentary
	– we may need assistance in the future – SARS diesel rebates, technical skills and financial ability are all issues impacting on negotiations between small miners and contractors which ultimately will have an impact on shares and dividends.	
13. Any other areas	General discussion on policy changes	